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10/753,250	01/08/2004	Rhonda L. Childress	AUS920030930US1	7961

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EXAMINER	
HUR, ECE	
ART UNIT	PAPER NUMBER
2175	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/753,250	CHILDRESS ET AL.	
	Examiner	Art Unit	
	ECE HUR	2175	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 May 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,5-10,12-14 and 44* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5-10,12-14 and 44* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *08 January 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This action is responsive to Response/Arguments filed on May 7, 2008. Claims 4, 11 and 15-43 are canceled, claim 1 is amended, and claim 44 is added.

Status of Claims

Claims 1-3, 5-10, 12-14 and 44 are pending in the case.
Claim 1 is the independent Claim.
Claims 1-3, 5-10, 12-14 and 44 are rejected under 35 U.S.C. 103(a).

Response to Arguments

Applicant's arguments filed May 7, 2008 have been fully considered but they are not persuasive. See rejection details. Applicant argued:

1) Regarding Claims 1, 15, and 16, the rejection under Double Patenting is withdrawn, because applicant filed Terminal Disclosure.

2) Regarding Claims 15-43, the rejection under 35 U.S.C. 101 is withdrawn because applicant canceled the Claims.

3) Applicant argues about the amended Claim "performing an adjustment to system", amendment necessitated the new ground(s) of rejection. See rejection details.

4) Applicant argues that Caccavale does not teach the Graphical User Interface aspect. It would be obvious at the time of the invention to illustrate the three dimensional graph(Caccavale, Column 4, lines 26-29) on a graphical user interface because this would allow the user monitor the network more efficiently.

5) Applicant argues that Caccavale discloses a sphere and a cube is not same as the claimed target-type display, however sphere in FIG. 12, there is shown a graph with RT.sub.1, RT.sub.2, and RT.sub.3 as the x, y, and z axes, respectively. Each sequential set of 3 response time values creates a triplet as shown in FIG. 13. Each triplet forms a single point on the graph. The maximum permissible response time forms a cube with the length of the sides being equal to RT.sub.sat, as shown. It has been empirically determined that the set of triplets measured over time will typically be bounded by a sphere of radius r.sub.b. The center of the sphere (which also defines the center of the cube) can be determined, for example, by computing the arithmetic mean of the triplet values calculated over a period of time. The radius, r.sub.b, can then be defined as the distance from the most recent triplet value (or from the average position of a set of recent triplet values) to the center of the sphere. Applicant should duly note that sphere contains the metric point of current server capacity utilization. (Caccavale, Column 27, lines 5-68, Column 28, lines 30-39).

6) Regarding Specification objection, the objection is withdrawn because applicant amended the Specification.

7) Applicant argues that Manghirmalani does not indicate "improvement required performance", however in FIG. 6 there is indication of network being over loaded and error rates which are indication of required correction: the result is that any deviations from normal network behavior can be more quickly identified and corrected. (Manghirmalani, Columns 9, 10).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-3, 5-10, 12-14 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caccavale, US 5,819,033.

Regarding Claim 1, Caccavale discloses the claimed aspect of a method for monitoring system performance and communicating detailed system

performance(Abstract, Fig.12) data via an enhanced graphical representation(Caccavale, Column 4, lines 26-29, FIG. 12), comprising: querying a current monitoring configuration(Abstract); monitoring system performance using instructions obtained from the current monitoring configuration(Caccavale, Column 2, lines 16-19); polling system data according to the current monitoring configuration; and displaying the polled system data on a graphical representation(Caccavale, Column 3, lines 58-66, FIG.12), wherein the graphical representation comprises a target-type management vector display including regions representing levels of system performance(Column 29, lines 6-19, FIG.12), more specifically, wherein the sphere in FIG. 12 is one of region of acceptable performance, while the region external to the cube represents a region of unacceptable performance, and a metric point within the display identifying the current status of system performance at a particular point in time(Caccavale, Column 27, lines 57-63).

Caccavale discloses the claimed aspect of performing an adjustment to system operations based on a region in which the metric point is located in the target-type management vector display to move system performance towards a target operational state represented by a point where the vertical axis and horizontal axis meet on the management vector display, wherein a method and system for dynamically improving the performance of a server in a network, a tuning system monitors a workload of the server in real time, monitors a set of internal performance characteristics of the server in real time, and monitors a set of adjustable server parameters of the server in real time. The workload of the server may include the frequency and type of service

requests received by the server from clients in the network. The internal server performance characteristics may include, for example, a data cache hit ratio of a data cache in the server. The set of server parameters may include, for example, the overall data cache size or the data cache geometry of the server. The tuning system periodically alters one or more of the set of adjustable server parameters as a function of the workload and internal performance characteristics of the server. Since the tuning system is continuously monitoring workload and performance characteristics of the server and altering the server parameters accordingly, the effectiveness of a given change in the server parameters is reflected in the next set of monitored workload and performance values. Furthermore, Caccavale provides a computer network and provides a dynamic method of analyzing and improving the performance of the network, it is directed to a system and method for improving the performance level of a network server by dynamically adjusting (i.e. tuning) the parameters of the server in response to changes in the workload of the server. (Caccavale, Abstract, Column 1, lines 10-17).

Applicant should duly note that dynamic adjustment would provide continuous service.

Caccavale does teach graphical representation of a target type pattern, however does not teach the graphical user interface aspect. It would be obvious at the time of the invention to illustrate the three dimensional graph(Caccavale, Column 4, lines 26-29) on a graphical user interface because this would allow the user monitor the network more efficiently.

Regarding Claim 2, most of the limitations have been met in the rejection of Claim 1. See details for Claim 1 rejection. It is inherent in Caccavale's invention that determining whether the polled system data is reportable; selecting a report to display the polled system data(Column 4, lines 26-29, Column 3, lines 54-61), wherein possible workload values plotted; and identifying information in the polled system data to display in the report. (Column 3, 42-61).

Regarding Claim 3, most of the limitations have been met in the rejection of Claim 1. See details for Claim 1 rejection. Caccavale discloses the claimed aspect of the metric point within the target-type management vector display provides the performance status of a particular area of the system at a particular time,(Column 29, lines 6-19, FIG.12), more specifically, wherein the sphere in FIG. 12 is one of region of acceptable performance, while the region external to the cube represents a region of unacceptable performance, and a metric point within the display identifying the current status of system performance at a particular point in time(Caccavale, Column 27, lines 57-63, Column 2, lines 5-10).

Regarding Claim 5, the limitations have been met in the rejection of Claim 1. See details for Claim 1 rejection. Caccavale discloses the claimed aspect of multiple metric points are used in the display to identify a trail of system status information determined

at fixed periods of time(Column 2, line 9) in FIG. 12, wherein metric points are illustrated inside the sphere.

Regarding Claim 6 most of the limitations have been met in the rejection of Claim 5. See details for Claim 5 rejection. Caccavale discloses the claimed aspect of the metric trail is used to determine the effect adjustments to system operation have on system performance. (Caccavale, Column 4, lines 24-42, Column 29, lines 6-26).

Regarding Claim 7, most of the limitations have been met in the rejection of Claim 5. See details for Claim 5 rejection. Caccavale discloses the claimed aspect of the distance between consecutive metric points indicates the rate of change of system performance over a fixed period of time, wherein the workload changes over time and workload is plotted to create three dimensional representation. (Caccavale, Column 3, lines 50-66).

Regarding Claim 8, most of the limitations have been met in the rejection of Claim 1. See details for Claim 1 rejection. Caccavale discloses the claimed aspect of the target-type management vector display includes a vertical axis and horizontal axis(FIG.12) representing user-defined attributes. (Caccavale, Column 27, lines 56-63).

Regarding Claim 9, most of the limitations have been met in the rejection of Claim 8. See details for Claim 8 rejection. Caccavale discloses the claimed aspect of the user-defined attributes include transactions over time, wherein monitoring the workload and performance characteristics of the server and altering the server parameters accordingly and the effectiveness of a given change in the sever parameters is reflected in the next set of monitored workload and performance values. (Caccavale, Abstract).

Regarding Claim 10, most of the limitations have been met in the rejection of Claim 8. See details for Claim 8 rejection. Caccavale discloses the claimed aspect of industry baseline metrics are used to set the attributes, wherein the internal server performance characteristics may include, for example, a data cache hit ratio of a data cache in the server. The set of server parameters may include, for example, the overall data cache size or the data cache geometry of the server. (Caccavale, Abstract).

Regarding Claim 14, most of the limitations have been met in the rejection of Claim 1. See details for Claim 1 rejection. Applicant should duly note that it would be obvious to one of ordinary skill in the art at the time of the invention to have more than one of the same representation "multiple target-type management vector displays, each display representing system performance for a different set of variables" depending on the programmer's choice based on the user's need.

Regarding Claim 44, most of the limitations have been met in the rejection of Claim 1. See details for Claim 1 rejection. Caccavale discloses the claimed aspect of updating the target-type management vector display to include a new metric point identifying an updated status of system performance as a result of the adjustment to the system operation, wherein the tuning system is continuously monitoring workload and performance characteristics of the server and altering the server parameters accordingly, the effectiveness of a given change in the server parameters is reflected in the next set of monitored workload and performance values. (Caccavale, Abstract, FIG.12).

Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caccavale, US 5,819,033, in view of Manghirmalani, US 5,819,028.

Regarding Claims 12-13 most of the limitations have been met in the rejection of Claims 1, 16 and 30. See rejection details for Claims 1, 16 and 30. Caccavale discloses the claimed aspect of the target-type management vector display comprises two regions, wherein a first region indicates satisfactory performance (FIG.12, sphere), a second region indicates unacceptable performance (FIG. 12, when sphere intersects the cube is the unacceptable region).

Caccavale does not specifically teach another region "a third region indicates improvement required performance" and regions are displayed using different colors, however Manghirmalani discloses three different region in FIG. 6, L 606, N 607, H 608. The region 606 is shaded in red. (Caccavale, Column 9, lines 38-40). Furthermore in FIG. 12, 1211, 1212, 1213 indicated regions with different colors. (Caccavale, Column 12, lines 34-37).

It would be obvious to one of ordinary skill in the art at the time of invention to combine Caccavale's target vector representation with Manghirmalani's different color region concept because this would allow the user to monitor the system more efficiently.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1) Leong et al., US 6,728,219, 04/27/2004, "Graphical user interface system and method for visually gauging network performance".
2) Villado et al., US 20040111507, 06/10/2004, "Method and system for monitoring network communications in real-time".
3) Anderson et al., US 20040017403, 01/29/2004, "Data view of a Modelling System".

4) Childress et al., US 7,401,142, 07/15/2008, "Method For Multidimensional Visual Correlation of Systems Management Data Displaying Orchesteration Action Threshold".

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ECE HUR whose telephone number is (571) 270-1972. The examiner can normally be reached on Mon-Thurs 7:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, WILLIAM BASHORE can be reached on 571-272-4088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

August 14, 2008

Ece Hur
E.H. /e.h.

/Kieu D Vu/

Primary Examiner, Art Unit 2175